



TACTICAL AIRFIELD GUIDE



UNCLASSIFIED

(U) Tactical Airfield Guide

1. (U) REFERENCES:

- a. (U) AR 385-10, Army Safety Program, 29 Feb 00.
- b. (U) AR 95-2, Air Traffic Control, Air Space, Airfield flight Facilities and navigational Aids
- c. (U) TM 5 -803-7 Airfield and Heliport Planning and Design, 1 May 99 .
- d. (U) TM 5-811-5, Army Aviation Lighting.
- e. (U) TM 5-823-4, Army Airfield Markings.
- f. (U) FM 5-430-00-2/AF Joint Pamphlet, Vol. 2, Planning and Design of Roads, Airfields, and Heliports in the Theater of Operations.
- g. (U) FM 1-111, Aviation Brigades, 27 October 1997
- h. (U) DA Pam 385-64, Ammunition and Explosive Safety Standards, 28 Nov 97.
- i. (U) USAREUR Pam 385-15, Leaders Force Protection Guide, 6 Sep 94.
- j. (U) V Corps Field SOP Part I, 1 October 1994.
- k. (U) V Corps Field SOP Part II, 1 April 1995.
- l. (U) V Corps Safety SOP, 18 February 1998.

2. (U) PURPOSE: To provide guidance for the safety procedures involved in an initial deployment to a tactical airfield site or extended deployments involving the construction of an airfield in actual combat or Operations Other than War (OOTW).

3. (U) APPLICABILITY: This document is a guide and reference. It does not supersede regulations or other directives from which the material was derived and compiled. This guide is applicable to all personnel assigned or attached to the V Corps or its subordinate units.

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4. (U) EXECUTION:

a. (U) Commanders should use their unit safety and standardization officers to assist S3/G3s in conducting risk management for tactical airfield operations and providing input to Engineers on the planning and construction of tactical sites when applicable.

b. (U) V Corps Safety Director provides overall coordination with Corps Engineers for the review of plans and operational risk management activities in the V Corps operational area.

c. (U) V Corps Engineer Officer will be the principal point of contact for V Corps Safety and units on all issues regarding the planning/construction of tactical/out of sector airfields.

d. (U) Commanders of participating units will ensure that:

(1) (U) Surveys are conducted on airfield/landing sites.

(2) (U) Standards as established in ARs, FM, TMs, and SOPs are enforced.

(3) (U) Risk assessments are performed on all aspects of planning, deployment and operation of tactical airfield sites. This requires an in-depth risk assessment be conducted prior to the planning or construction of the airfield or the commencement of routine flight operations. If an in-depth risk assessment cannot be conducted, a hasty risk assessment is the next best option.

(4) (U) Waivers are completed for all areas in which written standards can not or will not be met.

(5) (U) Risk exposure control measures are developed, implemented and enforced to ensure safe daily operations.

(6) (U) Unit standard operating procedures (SOPs) and aircraft specific procedures are followed. Incorporate specific aviation procedural operations instructions into an aviation procedure guide.

(7) (U) Air Traffic Control and Airfield procedures are established. Identify and correct any discrepancies through proper channels, to include implementing an Aircraft Parking Plan and effective Mid-Air Collision Avoidance (MACA) program. Ensure that instrument approaches flown to deployed locations are DOD approved approaches. If not, then work the coordination for obtaining approval through the appropriate agencies and information G-3 Airspace Management.

(8) (U) Ensure that required flight safety briefings are given to flight crewmembers and passengers, as appropriate. Ensure aircrews are properly briefed on local area flying operations

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to include unfamiliar field procedures, local weather phenomena, aircraft entry and exit procedures, emergency procedures, foreign object damage (FOD) prevention, bird avoidance procedures, and any other pertinent flying operations.

(9) (U) Ensure minimum DOD explosive safety standards are met for munitions storage, operating locations, aircraft munitions, ship and EOD operations. Where minimum DOD standards cannot be met, a request for an explosives safety waiver must be submitted to V Corps Safety for approval.

5. (U) INITIAL PLANNING:

a. Risk Management: Initial safety issues in planning for a deployment to tactical airfield site requires the Aviation Safety Officer (ASO) to coordinate Risk Management efforts with S3/G3. There are no “separate” safety issues but one integrated plan that includes acceptable/required standards. There is no single regulation or manual that will provide specific guidance to be used in planning aircraft parking, traffic control, placement of temporary FARP, hangars, etc. Each site must be reviewed for hazards based on terrain, threat, support facilities, available fixed structures, environment, mixed traffic, density, etc. Enclosed at Appendix A is an example of a Risk Management worksheet completed for Camp Bondsteel. It is not all-inclusive but can be used as a reference for S3/G3 and ASO when completing risk assessments.

b. Airfield Planning: TM 5-803-7 must be used for airfield planning. The Aviation Safety Officer/S3/G3 should determine, based upon the guidance in TM 5-803-7 Attachment 3, the amount of space required for aviation operations. The appropriate real estate should be identified and marked off as soon as practicable to ensure adequate space is reserved for aviation operations. Remember to include space for landing/takeoff pads, runways, taxiways, maintenance areas, FARPs and clear space for approach and departure paths. The construction criteria for rotary-wing runways, helipads, landing lanes, and hover points are covered in chapter 4. Chapter 5 covers taxiway requirements and chapter 6 details aprons and other pavements including parking ramps. Although the Technical Manual is for fixed installations, clearance requirements must be used whenever possible. These clearances are minimum requirements for a fixed installation with required lighting, airfield marking, and ATC traffic control. Reduced clearances in unimproved field sites with long term operational exposure will significantly increase overall risk. During contingency operations where the requirements of TM 5-803-7 cannot be met, commanders must ensure that risk reduction controls are used and that approval for parking/airfield operations is made at appropriate level. All planning must be made under the assumption that the airfield may eventually become a permanent facility. Enclosed at Appendix B are examples of tactical airfield hazards, issues, photos, and certain concerns. Information provided is based on previous and current airfields at deployment sites.

c. Aircraft parking: Parking of aircraft will be a major concern. It will be influenced as much by space available as terrain obstacles. Most aviation operations prefer parking where

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aircraft are mast-to-mast facing outward toward the perimeter (see Appendix B). Again, situation will dictate. Engineers can be of invaluable assistance. If you know the number and type of aircraft and required parking distances (hub to hub), they can assist in laying out the space for the pads. Several different methods of paving parking pads have been used. The tadpole pad, which saves materiel, presents a problem when parking at night in poor weather. Pilots have to ensure the tail wheel is aligned. Usually sandbags for security and marking surround the narrow portion. A regular square-parking pad is preferable but will increase the cost, however, it is safer and more secure. It presents larger area for movement, maintenance, and allows for greater flexibility when setting the aircraft down.

d. Uploaded Aircraft: Armament will be a consideration when parking AH-64 and OH-58D aircraft. Revetments are not usually available nor can you expect them to be built in most contingency operations. Hesco Bastions or other barriers can be provided to the front and possibly to sides if space is available. The Hesco Bastions can be doubled in parking areas to serve as possible windbreaks as well. They have been used with success in Macedonia, Bosnia, and Kosovo airfield sites. A deployed unit in Bosnia staggered (i.e. mixed parking of aircraft) parking of AH-64 and UH-60 aircraft when the Apaches were uploaded. This was one way of minimizing or reducing collateral damage in case of fire or explosion of an aircraft. When possible, park armed aircraft facing the perimeter away from living, and built up areas. Minimize the storage of ammunition on the parking pads and minimize, within mission requirements, the amount of ammunition that remains uploaded. In many cases, you will be unable to meet the standards required for parking uploaded aircraft. Ammunition and explosives standards can be found in DA PAM 385-64. Chapter 5, DA Pam 385-64 provides quantity distance for airfields and heliports. Further guidance can be found in Appendix J, Section V, FM 1-111. The first Commanding General in the chain of command can approve waivers for ammunition storage on airfields for Low to High Residual Risk. Normally, this would be the Task Force Commander. Extremely High risk waivers must be approved at MACOM level. Quality Assurance Specialists, Ammunition Surveillance personnel from G4 as well as V Corps and USAREUR Safety are available to provide guidance on ammunition storage.

e. Construction: Considerations for airfield marking, lighting, and paving must be coordinated with engineers. TM 5-811-5 established the lighting standards. TM 5-823-4 establishes the marking standards for helipads. The Camp Bondsteel airfield was built on area where the soil had been disturbed. Dust/blowing snow/FOD were all serious problems. Although parking pads were paved the taxiway between was not. The type of gravel used created another hazard due to blowing fragments striking aircraft and equipment. It was well-graded gravel with high percentage fine. Optimum is a single grade 2 and one half inch washed gravel compacted. Avoid ¾ inch or less minus gravel as it will quickly become a FOD problem. One lesson learned was that unless there is good terrain with minimum disturbance, the airfield should be paved as soon as possible. Long-term deployments should plan for an airfield that meets all TM requirements as much as feasible. Terrain and environment will play a significant role in airfield planning. During Task Force Hawk, unsuitable parking areas resulted in the commander delaying deployment. Initially, unimproved areas may be used after a risk

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management assessment of blowing sand, rocks, obstructions, snow, and other hazards are considered. Initially pads can be controlled with AM2 matting surrounded by coarse gravel. The Goal for any prolonged operation should be to pave parking pads, FARP areas, and taxiways.

f. Aviator Procedure Guide (APG): Time constraints will dictate if an Aviator Procedures Guide (APG) can be formally completed and briefed prior to deployment or commencement of operations. However, local flying rules, and heliport operations SOPs will have to be initiated as soon as possible. Long-term exposure to a poorly planned and constructed temporary airfield will increase the risk of accidents or incidents as operations continue. Improvements to an airfield such as paving, marking, and spacing will improve conditions but a failure to establish and enforce standards may negate any risk reduction gains realized.

g. Foreign Object Damage (FOD): FOD must be aggressively controlled. From initial arrival, commanders must ensure that a FOD control plan is developed and implemented for airfield parking, taxiway, and hangar areas.

h. Forward Arming Refueling Points (FARP)/Forward Area Refueling Equipment (FARE): Hot refueling and rearming of aircraft will be an immediate issue. In tactical/peacekeeping deployments, most aircraft remain uploaded with little rearming completed at the FARP with the exception of gunnery ranges such as GLAMOC in Bosnia. However, building or setting up a FARP/FARE site will be influenced by time constraints and planning. The airfield planning of Camp Bondsteel, Kosovo included an extensive review of airfield FARP construction. The plans were reviewed and approved by the aviation Task Force Commander with recommendations from the Brigade and Task Force ASO and S3. The V Corps Safety Office also reviewed the plans. Commanche Base, Bosnia has continued to improve the FARP site and currently has an excellent four point FARP with helipad, paved FARP landing pads with secondary spill containment built into the pads. Examples can be seen in Appendix B. The basic guidelines for setting up a FARP to include required equipment, specific standards, and environmental issues can be found in Chapters 15 and 16, FM 10-67-1. Another very useful manual is FM 1-111. Appendix J, FM 1-111 discusses in detail Forward Arming and Refueling Points. Recommend the ASO, S3/G3, and III/V Platoon Leader/NCO review Appendix J and include it as one of their deployment publications along with FM 10-67-1. Most units have a FARP checklist for tactical operations. Two examples are located at Appendix C.

i. Landing Zones: Tactical deployments will always result in a requirement for landing zones both at tactical field sites and various locations within the area of operations. These sites should be surveyed and inspected by the unit S3/G3 ops in conjunction with the Aviation Safety Officer for hazards and suitability. Long-term exposure must be taken into consideration. What may be considered suitable for one time or short term use for an experienced well briefed crew may not be suitable for a long term deployment without improving the site, reducing risk, etc. An example of a LZ sketch checklist is at Appendix D.

6. (U) AIRFIELD SITE CONSTRUCTION PLANS:

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a. Several issues will arise prior to deployment. A long term deployment, (i.e. six months to indefinite), requires immediate action to initiate the planning sequence for an airfield. Major agencies involved in airfield construction that the Aviation Safety Officer should be familiar with are Engineers, Force Protection, Safety, G4 and US Army Aeronautical Services Agency-Europe (USAASD-E). Plans will be reviewed at Brigade, Division, and Corps level for hazard assessment as well as proposals for the parking, taxiway, FARP, ATC location, hangars, and other issues directly affecting aviation operations. In order to avoid confusion and minimize changes, it is important that concerns be surfaced and recommendations made as early as possible regarding construction. During the construction of the airfield at Camp Bondsteel numerous changes occurred as various individuals would submit to the Camp Engineers their objections or proposals. It is imperative that the chain of command be used/enforced when any recommended changes to the approved plans are made by anyone. Once construction has started, proposed changes to this plan must come from Base Commander (Task Force Commander).

b. Waivers for explosives have been discussed. However, parking, FARP, ATC procedures, and airfield traffic restrictions may also require waivers. All waivers must be processed through Task Force Commander for approval at the proper level.

c. Clamshells are normally provided for maintenance support. The areas selected for the clamshells should be paved or the surface stabilized. Grounding points must be constructed for hangars and normal safety inspections conducted to ensure adequate lighting, heat, fire protection, exits, and waste containers are provided. Clamshells can normally resist winds up to 75 knots. When hangaring aircraft in high winds, be very careful when opening the doors. Experience has shown that when opening a clamshell door in high winds, a vacuum will be created causing a pressure differential within the hangar with catastrophic results. It is recommended that the door opposite of the door to be opened be raised a few feet prior to fully opening the door to be used. Do not open the doors in winds above 30-knots, it can cause problems. Doors need to remain closed in high winds (30 knots or greater) for structural support. High winds create a tremendous load on the hangar and the structure will deflect causing doors to stick. Another issue is snow removal. Hangars have collapsed under the weight of excessive snow. Maintain adequate heat and periodically inspect the Clamshells during heavy snowstorms. Any accumulation of snow must be removed as soon as possible. Be very careful when clamshells have a liner. Even with adequate heat, the liner may prevent the snow from melting sufficiently not allowing it to shed.

d. Mooring points for aircraft parking pads may be delayed or overlooked. They must be provided for long-term deployments. Recommend that Field Mooring Kits be part of deployment packages into any area where high winds may be a hazard. Units should order extra rods. In some areas, you will need the support of engineers to install the rods.

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7. (U) Appendix A – E are examples to be used as guidance and a reference for information that units can use in preparation for deployment and during the set up of tactical airfields.

APPENDIX A – Example of a Risk Management Worksheet (Camp Bondsteel)

APPENDIX B – Parking diagram of Gibbs Army Airfield (Tirana, Albania), Example Heli-pad and berm construction and airfield photos highlighting tactical airfield concerns.

APPENDIX C – Examples of Tactical Refueling Site Checklists (Two examples included).

APPENDIX D – Example PZ/LZ Diagrams.

APPENDIX E – Example Pre-Accident Plan.

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4. PREPARED BY: ASO,
RANK/LAST NAME/DUTY POSITION

5. HAZARDS	6. INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
Primary Taxiway Dust / Mud Primary surface slope	EH	Initial control is to surface taxiway with coarse gravel. Ultimately taxiway should be paved to meet the requirements of TM 5-803-7, para 5-2 Extensive engineer grading has leveled the primary taxiway surface (transverse and longitudinal) to the maximum extent practicable. The slope gradient does not meet the standards of TM 5-803-7, table 5-2. No further action is expected.	M	Initial construction and preventive maintenance by TF Falcon Engineers Install temporary lighting (e.g. bean bag lights) until permanent lighting can be installed	Periodic surveys by base camp assessment team, aviation safety officer and TF Falcon Engineers. Surveys to be conducted at least semi-annually (AR 385-95)	

9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE):			10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)
LOW	MODERATE	HIGH	EXTREMELY HIGH

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Primary Taxiway (con't) Taxiway shoulder slope		Extensive engineer grading has leveled the taxiway shoulder surface to the maximum extent practicable. The slope gradient does not meet the standards of TM 5-803-7, table 5-2. No further action is expected.				
Taxiway lighting		Taxiway is not currently lighted. TM 5-811-5 establishes the lighting standards for Army Heliports. Temporary lights sets should be used until permanent lighting IAW TM 5-811-5 can be installed				
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH			10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)			

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4. PREPARED BY: ASO
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5. HAZARDS	6. INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
Primary Taxiway (con't) Taxiway marking		Taxiway is not currently marked. TM 5-823-4 establishes the marking standards for Army Helipads. Temporary marking should be used until permanent marking IAW TM 5-823-4 can be installed				
Foreign Object Damage (FOD)		Develop and implement an aggressive foreign object damage control plan. Conduct daily FOD walks/police call on the taxiway, parking pads, VFR helipad, IFR helipad, and FARP. Expedite the paving of the taxiway to reduce the hazards of FOD.				
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH	10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)					

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5. HAZARDS	6. INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
Standard VFR Helipad location	M	The helipad is to be moved south (approx. 150 meters) to provide adequate space for aircraft taxiing to the FARP (TM 5-803-7, table 5-2, requires 100' from taxiway centerline to any fixed or mobile obstacles).	M	Move helipad south as required to provide space to taxi to the FARP.	Periodic surveys by base camp assessment team, aviation safety officer and TF Falcon Engineers.	
Helipad lighting		Helipad is not currently lighted. TM 5-811-5 establishes the lighting standards for Army Helipads. Temporary lights sets should be used until permanent lighting IAW TM 5-811-5 can be installed		Install temporary lighting (e.g. bean bag lights) until permanent lighting can be installed	Surveys to be conducted at least semi-annually (AR 385-95)	

9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE):

LOW

MODERATE

HIGH

EXTREMELY HIGH

10. RISK DECISION AUTHORITY:
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Standard VFR Helipad (con't) Helipad marking		Helipad is not currently marked. TM 5-823-4 establishes the marking standards for Army Helipads. Temporary marking should be used until permanent marking IAW TM 5-823-4 can be installed		Provide for temporary marking (e.g. use bean bag lights, paint, etc.) until permanent markings can be completed		
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH			10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)			

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5. HAZARDS	6 INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
IFR Helipad Helipad Lighting	EH	Helipad is not currently lighted. TM 5-811-5 establishes the lighting standards for Army Helipads. Temporary lights sets should be used until permanent lighting IAW TM 5-811-5 can be installed	M	Install lighting required for an IFR helipad IAW TM 5-811-5.	Periodic surveys by base camp assessment team, aviation safety officer and TF Falcon Engineers. Surveys to be conducted at least semi-annually (AR 385-95)	
Helipad clear zone and accident potential zone slope gradients		Helipad does not, and will not meet the slope gradients required by TM 5-803-7 for the clear and accident potential zones				

10. RISK DECISION AUTHORITY:
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9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE):

LOW MODERATE HIGH EXTREMELY HIGH

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IFR Helipad (con't) Helipad Certification		Helipad must be evaluated and certified by the US Army Aeronautical Services Agency - Europe (USAAAD-E) prior to operation as an IFR helipad		Request evaluation and certification of the helipad for IFR use from USAAAD-E Do not use helipad for IFR operations until properly certified.		
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH	10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)					

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	H								
Helicopter Parking Pads Parking Pad Lighting	H		Parking pads are not currently lighted. TM 5-811-5 establishes the lighting standards for Army Helipads. Temporary lights sets should be used until permanent lighting IAW TM 5-811-5 can be installed		H		Install lighting required IAW TM 5-811-5. Provide for temporary marking (e.g. use bean bag lights, paint, etc.) until permanent markings can be completed	Periodic surveys by base camp assessment team, and TF Falcon Safety Surveys to be conducted at least semi-annually (AR 385-95)	
Helipad marking			Helipads are not currently marked. TM 5-823-4 establishes the marking standards for helipads. Temporary marking should be used until permanent marking IAW TM 5-823-4 can be installed						

9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE):		10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)
LOW	MODERATE	
	HIGH	
	EXTREMELY HIGH	

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Helicopter Parking Pads (con't)		Initial control is to surface parking pads with AM2 mating surrounded by coarse gravel. Ultimately parking pads should be paved to minimize hazards		Pave the parking pads as resources allow		
Parking Pad Surface		Initial control is to surface parking pads with AM2 mating surrounded by coarse gravel. Ultimately parking pads should be paved to minimize hazards		Use field mooring kits until permanent mooring points can be installed.		
Mooring points		Install tie-down and mooring points IAW TM 1-1500-250-23		Use temporary grounding kits until permanent grounding points can be installed.		
Grounding points		Install and test grounding points IAW TM 5-811-3				

9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH	10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)
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Helicopter Parking Pads (con't) Ammunition Storage on Helicopter Parking Pads		Tactical mission requires aircraft to remain unloaded with ammunition. Minimum inhabited building distances (IBD) of DA PAM 385-64 can not be met due to the limitations of terrain and tactical situation. Analysis of the maximum net explosive weight (NEW) and the shortest IBD indicates a HIGH risk (blast zone)		Minimize the storage of ammunition on the parking pads. Store the minimum quantity; for the minimum amount of time, at the maximum distance from inhabited areas Revetments (Hesco bastions) will be provided to the front and sides of the pads (does not affect blast)	Waiver to ammunition storage requirements must be approved by first Commanding General in the chain of command	
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Helicopter Maintenance Hangars Flooring	M	Hangar floor surface will initially be constructed of plywood sheeting over heavy gravel. This is only adequate as a temporary measure since the plywood will absorb any spilled POL products becoming a fire and health hazard. TM 5-803-7 requires hangar floors to be paved IAW TM 5-825-3	M	Minimize delays in paving the hangar floor. Provide for rapid detection and repair or replacement of the temporary flooring if it becomes a safety hazard (fuel spill, tripping hazard, etc.).	Periodic surveys by base camp assessment team, and TF Falcon Safety Surveys to be conducted at least semi-annually (AR 385-95) Work area inspections to be conducted by maintenance supervisor daily	
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH				10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)		

RISK MANAGEMENT WORKSHEET

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1. MISSION/TASK: Aviation Safety Assessment, Camp Bondsteel Helipoint	2. DTG START: 17 Sep 99 END: Indef	3. DATE PREPARED: 7 Oct 99
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4. PREPARED BY: ASO
RANK/LAST NAME/DUTY POSITION

5. HAZARDS	6. INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
Camp Bondsteel Helipoint General (Due to the high intensity and high visibility of operations at Camp Bondsteel the following general control measures are recommended)		Develop an in-depth helipoint operations SOP. Require all permanent and transient personnel to read and initial that they understand and will comply with the SOP. This includes all personnel operating on the helipoint (e.g. aircrew, maintenance, POL, armament, and Brown and Root personnel) Implement and enforce a pro-active Operational Hazard Reporting system		SOP SOP and command emphasis	Periodic surveys by base camp assessment team, and TF Falcon Safety Surveys to be conducted at least semi-annually (AR 385-95)	
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE):			10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)			
LOW	MODERATE	HIGH	EXTREMELY HIGH			

RISK MANAGEMENT WORKSHEET

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1. MISSION/TASK: Aviation Safety Assessment, Camp Bondsteel Heliport	2. DTG START: 17 Sep 99 Indef END:	3. DATE PREPARED: 7 Oct 99
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4. PREPARED BY: ASO
RANK/LAST NAME/DUTY POSITION

5. HAZARDS	6. INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
Camp Bondsteel Heliport General	EH	Heliport Aircraft Rescue and Firefighting Program	M	Expedite the hiring and fielding of a fire department at the Camp Bondsteel heliport. Primary responsibility of the heliport fire department is aircraft rescue and fire fighting. Separate fire fighting assets must be provided for base camp functions. Immediately provide portable fire extinguishers IAW AR 420-90.		
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH				10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)		

RISK MANAGEMENT WORKSHEET

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4. PREPARED BY: ASO
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5. HAZARDS	6. INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
Camp Bondsteel Heliport General	H	Conduct weekly aircraft crash rescue drills. Due to the increased risk the frequency of crash drills must be increased Develop an Aviation Procedures Guide for aircrews. Provide right-seat ride/local area orientation for all personnel operating on the heliport	M	SOP and command emphasis SOP SOP		
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH	10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)					

RISK MANAGEMENT WORKSHEET

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5. HAZARDS	6. INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
Camp Bondsteel Heliport General	M	Develop and implement an aggressive foreign object damage control plan. Conduct daily FOD walks/police call on the taxiway, parking pads, VFR helipad, IFR helipad, and FARP. Immediately adjust the lights used for perimeter security to face outward from the heliport area. No high intensity lights are to shine in towards the heliport or up into the sky.	L	SOP and command emphasis Coordinate adjustment of security lights with Camp Bondsteel security officer and Camp Commandant		
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH						
10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)						

RISK MANAGEMENT WORKSHEET

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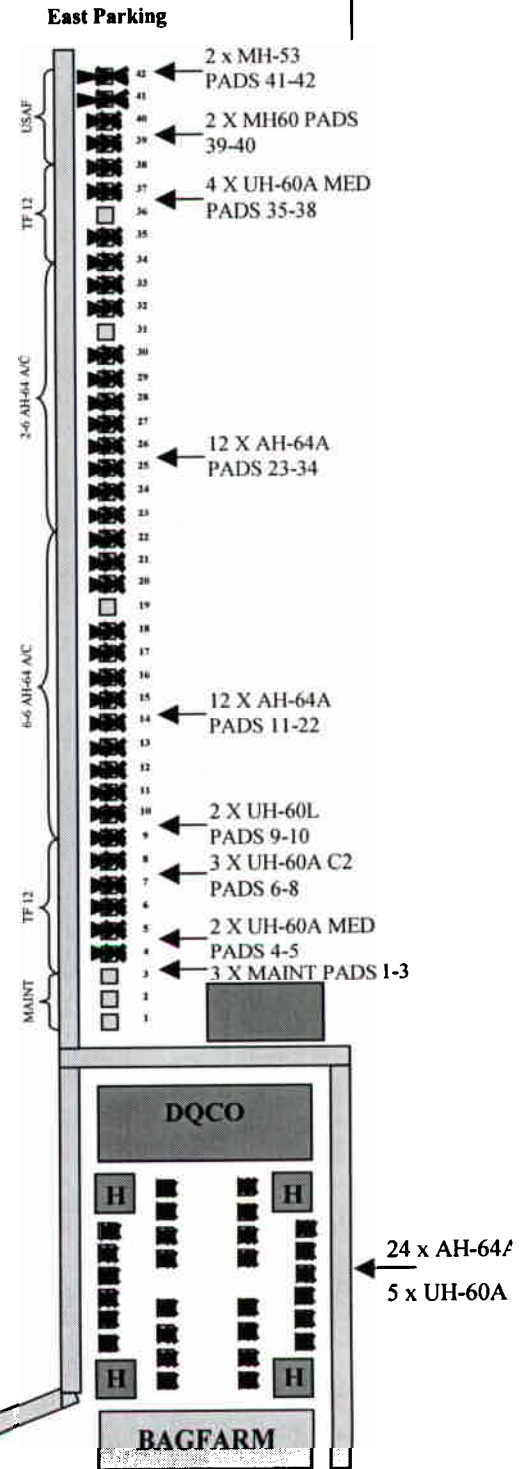
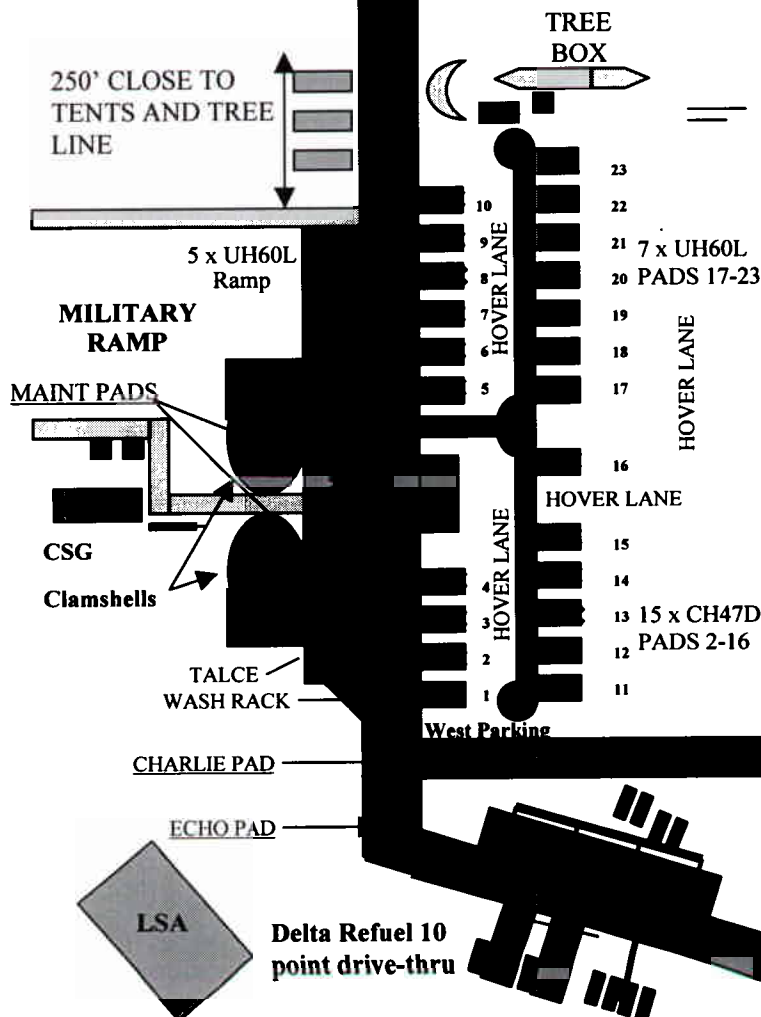
1. MISSION/TASK: Aviation Safety Assessment, Camp Bondsteel Heliport	2. DTG START: 17 Sep 99 END: Indef	3. DATE PREPARED: 7 Oct 99
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4. PREPARED BY: ASO
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5. HAZARDS	6. INITIAL RISK LEVEL	7. CONTROLS	8. RESIDUAL RISK LEVEL	11. HOW TO IMPLEMENT	12. HOW TO SUPERVISE	13. CONTROLS EFFECTIVE?
Camp Bondsteel Heliport General	H H	Continue the use of water and grass seed to control dust / mud in and around heliport. Engineers build ramp and stairs connecting hangars to the taxiway for pilots and crewchiefs.	L L	Coordinate with Engineers Coordinate with Engineers		
9. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (CIRCLE ONE): LOW MODERATE HIGH EXTREMELY HIGH			10. RISK DECISION AUTHORITY: (RANK/LAST NAME/DUTY POSITION)			

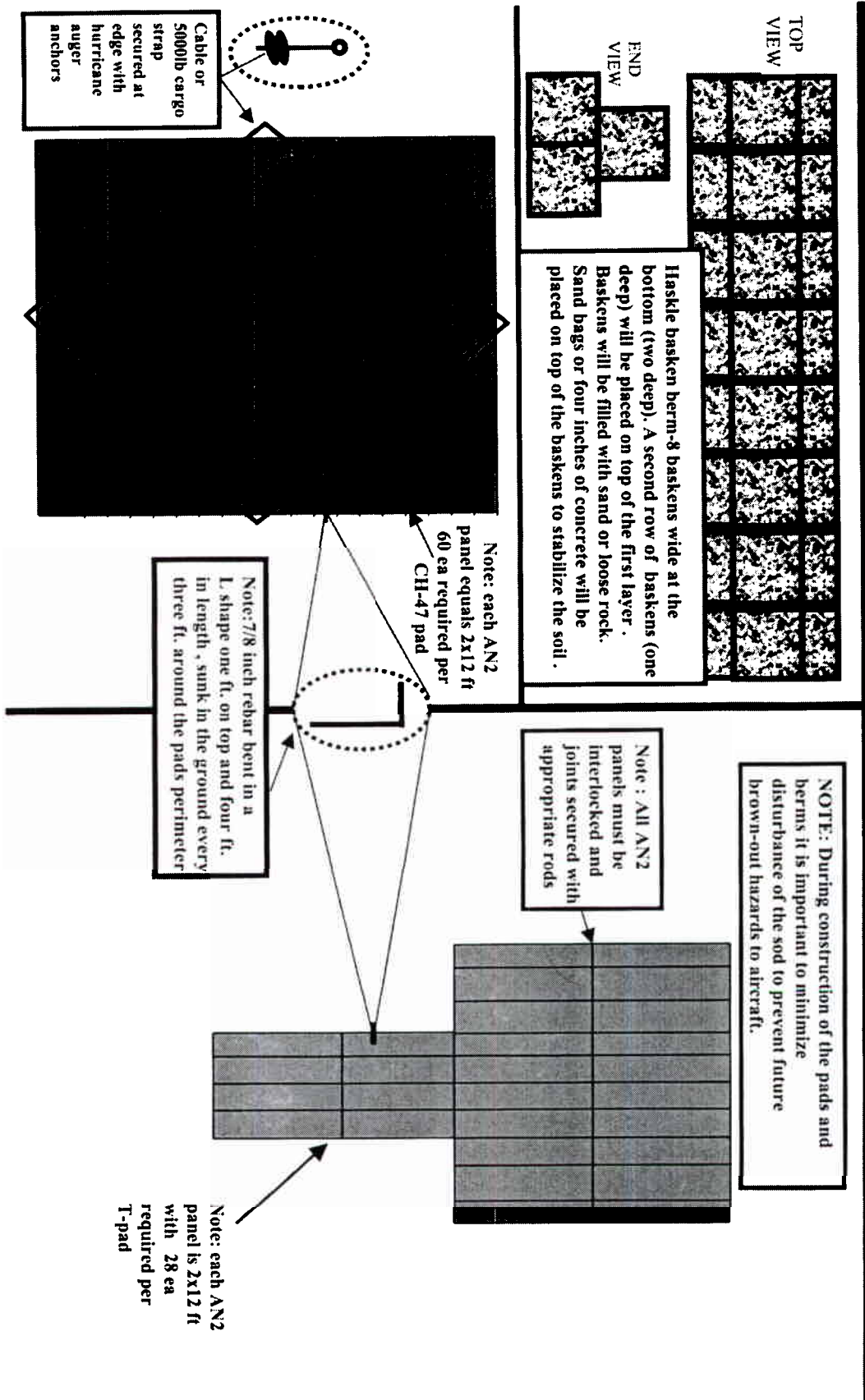
Gibbs Army Airfield (Tirana-Rinas) Parking

Summary	
AH-64	48
UH-60L	14
UH-60A C2	7
UH-60 MED	7
CH-47D	15
C12	2
MH-53/60	4
Total	97



NOT TO SCALE

HELL-PAD AND BERM CONSTRUCTION





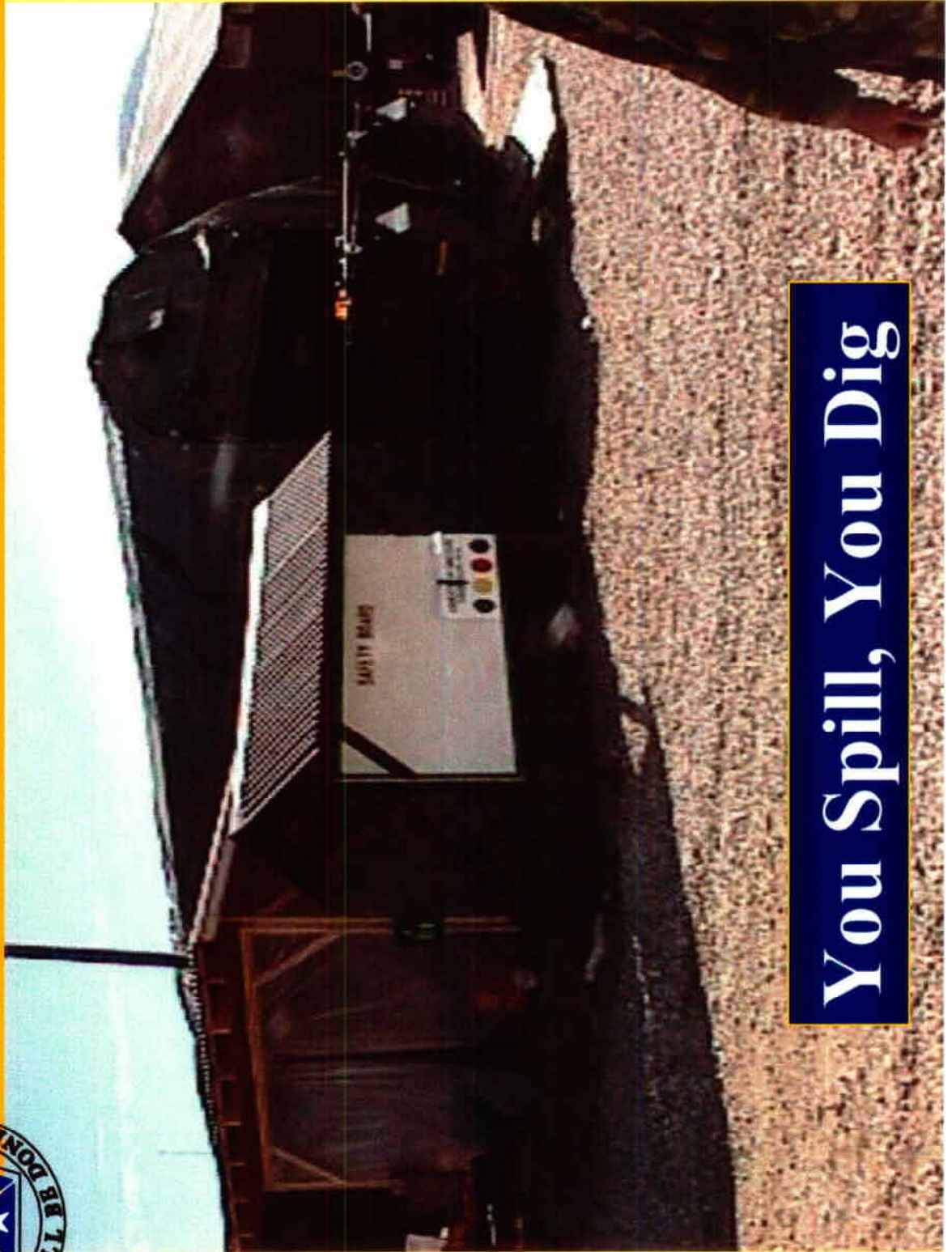
Explosive Safety



- Uploaded
- Site Plans
- Waivers
- Licenses
- Rapid Reaction Forces



POL Storage



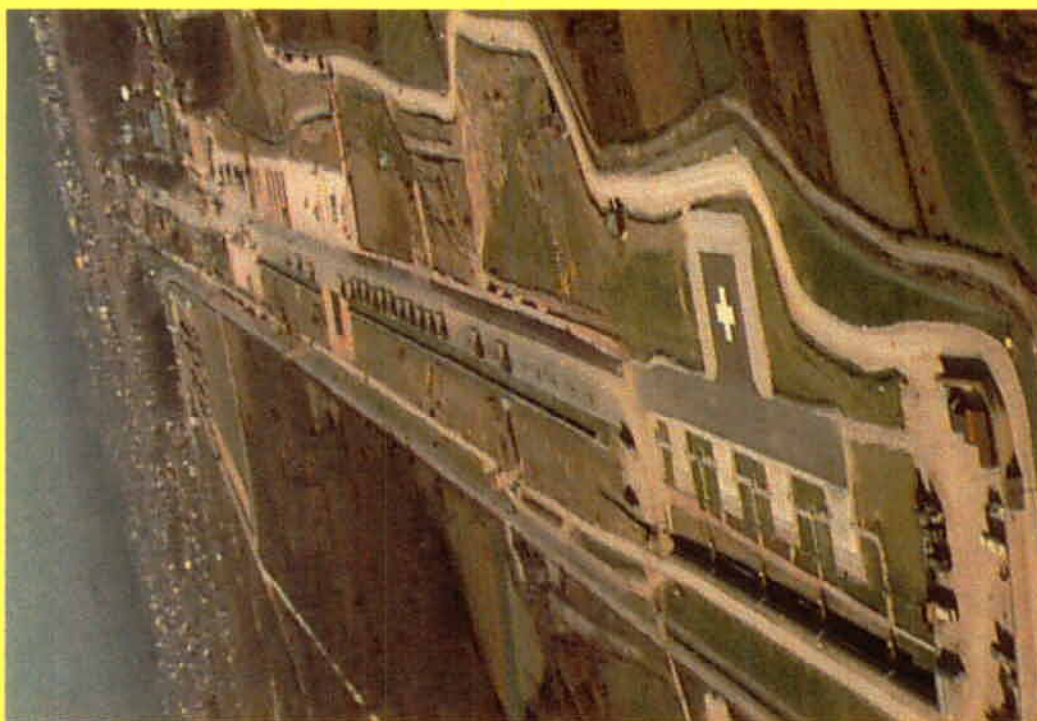
You Spill, You Dig



AVIATION SAFETY ISSUES



Commanch Base Before



Commanche Base - after



AVIATION SAFETY ISSUES

- ◆ Flight rules - multiple sources
- ◆ Uploaded A/C
- ◆ Weather - Fog
- ◆ Terrain 300' HD
- ◆ Complacency
- ◆ High-risk missions becomes routine!
- ◆ Situational Awareness





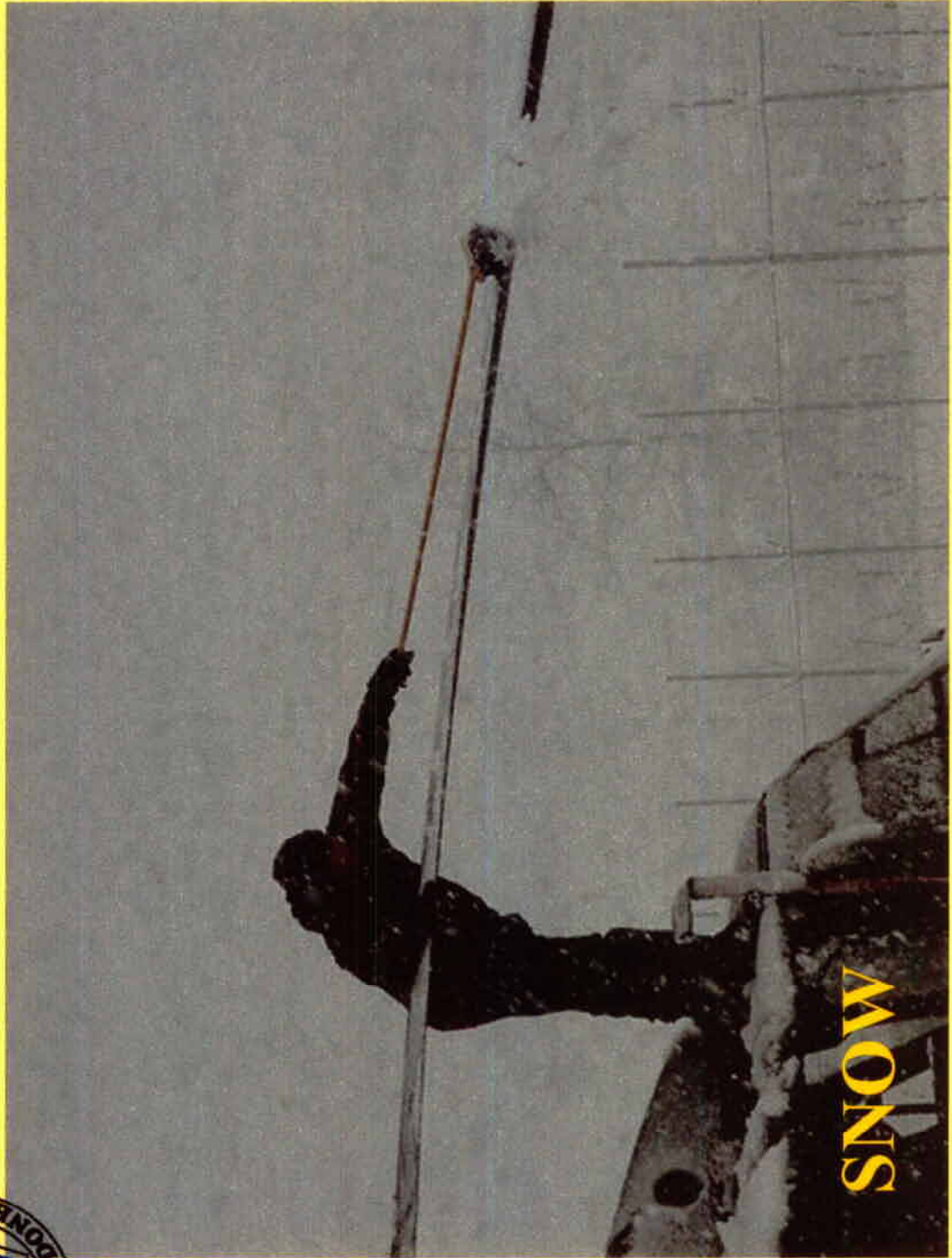
AIRFIELD ISSUES



FOG



Weather



SNOW



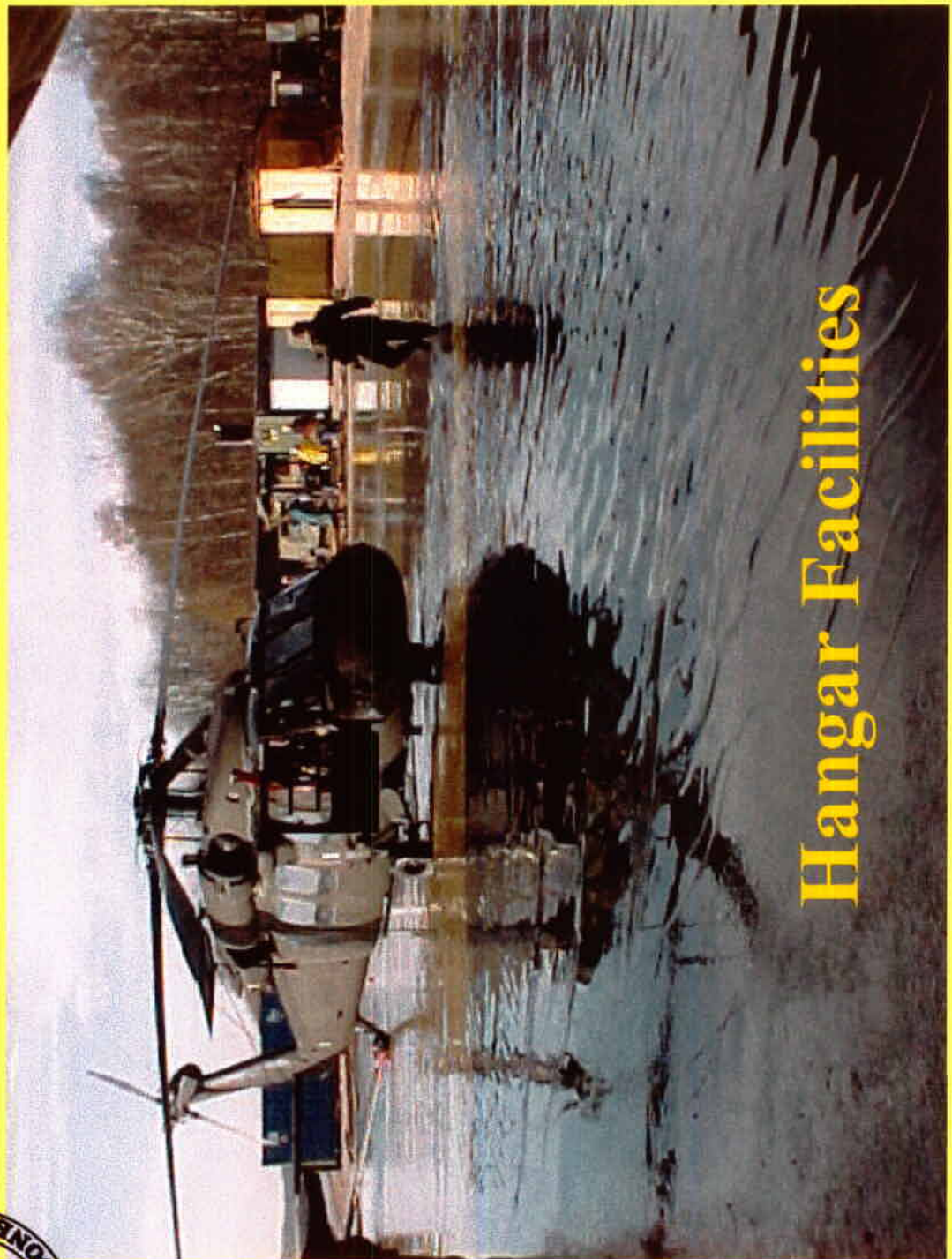
AIRFIELD ISSUES



Maintenance Facilities



AIRFIELD ISSUES



Hangar Facilities

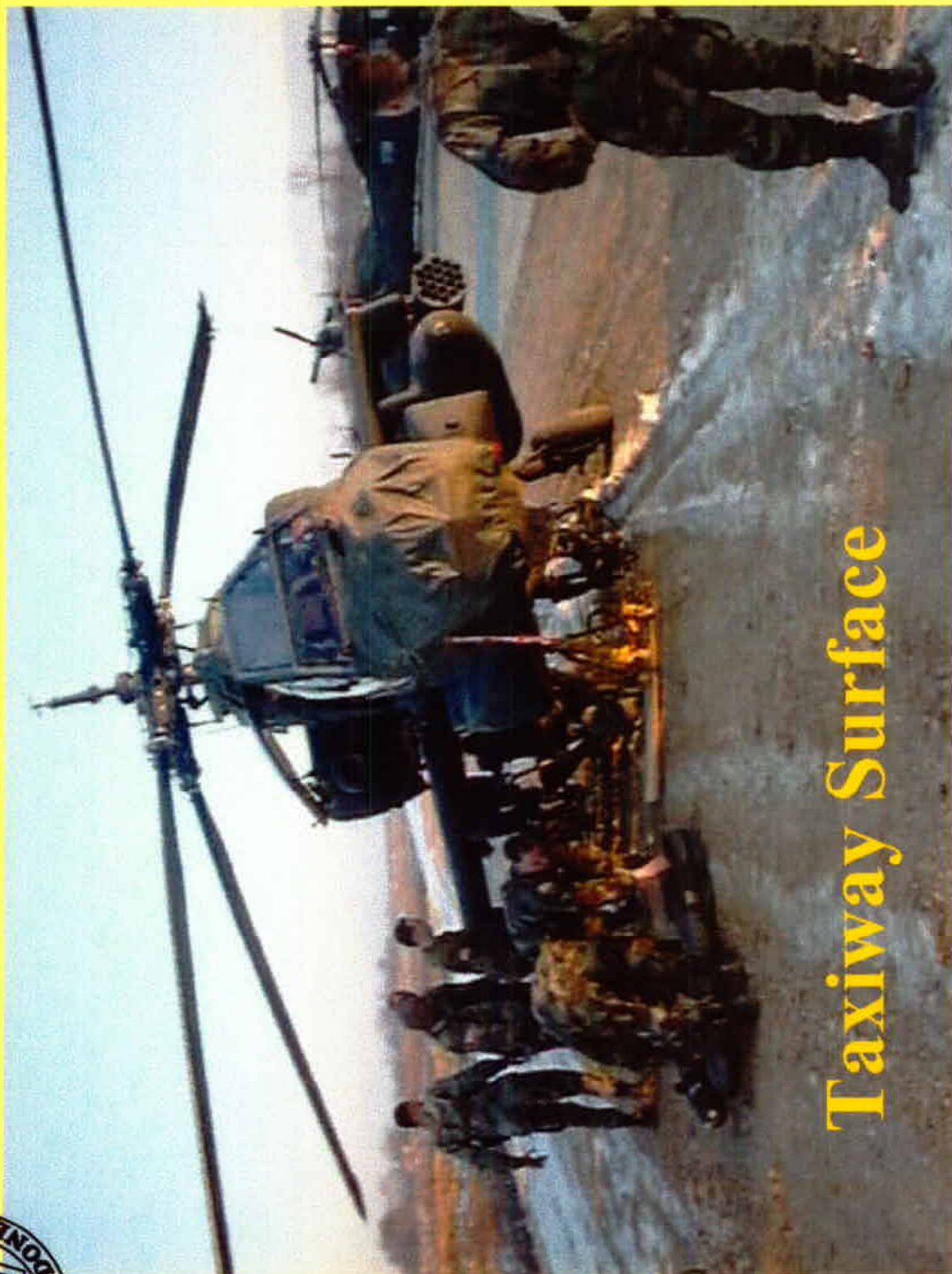


AIRFIELD ISSUES





AIRFIELD ISSUES



Taxiway Surface



AIRFIELD ISSUES



ENGINEER SUPPORT - COMMANCHE BASE



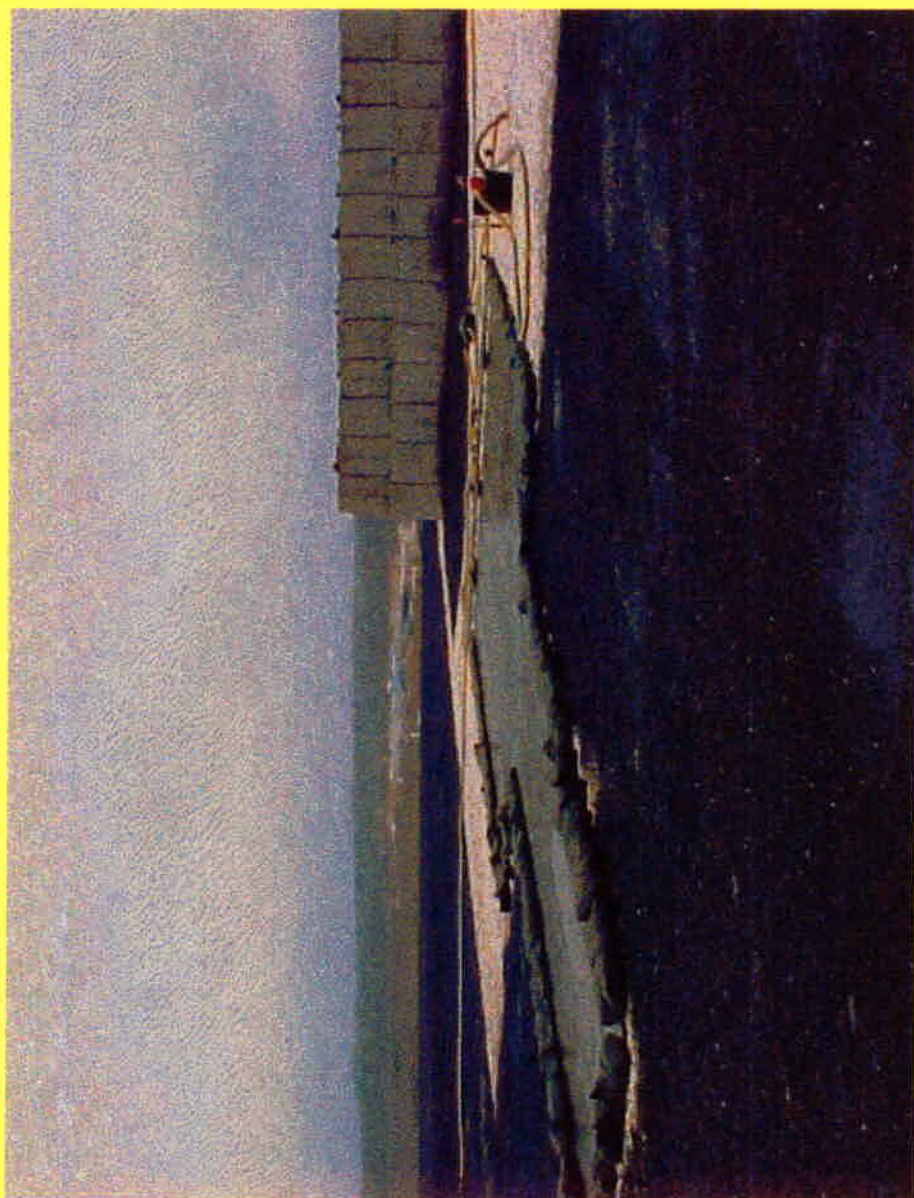
AIRFIELD ISSUES



FARP - CAMP BONDSTEEL, KOSOVO



AIRFIELD ISSUES



FARP - PARKING PAD, CAMP BONDSTEEL



AIRFIELD ISSUES

PARKING



(unit name)

TACTICAL REFUELING SITE INSPECTION CHECKLIST

FARP Name	Date	6-Digit Grid of FARP

POL OIC/NCOIC	ASO/Inspector Approving FARP
Print Rank/Name	Print Rank/Name
Signature	Signature

All FOUR panels of this checklist shall be completed prior to commencement of refueling operations.

This checklist will be used in lieu of those found in FMs 10-67-1 and FM 1-111. The designated Inspector will be accompanied by the Officer in Charge (OIC/NCOIC) of the tactical refueling site throughout the inspection. As indicated by the YES/NO check block, appropriate initials by both parties are required prior to any refueling operation.

LEGEND: = Mandatory answer in this block prior to refueling, or the absence of which will require termination of refuel. 2 = Desirable, but not mandatory. 3 = Mandatory answer if applicable (e.g., lighting for night operations).

SAFETY EQUIPMENT	POL – YES	POL – NO	ASO – YES	ASO – NO
a. Are fire extinguishers present, one at the pump assembly and one at each refueling nozzle? (1)				
b. Do fire extinguishers meet the requirements (e.g., charged, proper type, safety-tied/wired)? (1)				
c. Is sufficient water available to wash fuel spills from personnel or to wet fuel-soaked clothing before removing the clothing? (1)				
d. Are POL Handlers wearing PPC/PPE? (1)				
e. Do the grounding rods conform to required specifications for type and length?(1)				
f. Are explosion-proof flashlights available for night operations? (3)				
g. Are NO SMOKING, DANGER, PASSENGER MARSHALLING AREA, RESTRICTED AREA, ALARM and EMERGENCY SHUTOFF signs posted?(1)				
h. Are ignition sources collected outside the dispensing area? (1)				
i. Are grounding rods being used at pump-filter separator locations and at each dispensing point nozzle? (1)				
j. Are all wheeled vehicles secured with parking brakes and wheel chocks? (1)				
k. Has a berm been constructed around fuel bladders to contain fuel in case of rupture?(3)				

1. Are refueling vehicles marked with appropriate fuel grade, and HAZMAT/DOT (and ICC, as required) placards? (1)				
---	--	--	--	--

2. NOZZLES AND HOSES	POL – YES	POL – NO	ASO – YES	ASO – NO
a. Does each nozzle have proper grounding/bonding cable and wire attached?(1)				
b. Are both closed-circuit and open-port nozzles available for use? (1)				
c. Are dust covers attached to the nozzle and are they used? (1)				
d. Has the hose been tested at normal operating pressure with the nozzle closed?(1)				
e. Is the dispensing hose long enough to allow the <i>minimum</i> required 100-foot distance (mast-to-mast) between aircraft?(1)				
f. Do hoses show signs of blistering, saturation, nicks or cuts? (1)				
g. Are hose nozzle screens clean? (1)				
h. Are the hoses configured in a curved path (as practical, to allow for line surges without causing coupling or line failures); and allow full view of Aircraft Refuelers? (1)				

3. AIRCRAFT CONTROL AND EQUIPMENT	POL – YES	POL – NO	ASO – YES	ASO – NO
a. Is the parking area for each fuel dispensing point clearly marked? (1)				
b. Is a trained Air Traffic Controller or Pathfinder available at each refueling site (non-tactical environment)? (1)				
c. Does the FARP have two-way radio communications with aircraft before and immediately after refueling (non-tactical environment)? (1)				
d. Is the refueling site equipped with a lighting system for night operations? (3)				

4. SITE PREPARATION	POL – YES	POL – NO	ASO – YES	ASO – NO
a. Is the size of the site adequate for the operation? (1)				
b. Has the area been cleared of loose sticks, stones, and other debris that might cause FOD? (1)				
c. Does the layout ensure proper spacing between aircraft and refueling points (also see 2.e., above)? (1)				
d. Are all pieces of equipment and materiel that can be camouflaged covered with appropriate camouflage? (2)				
e. Are vehicles using one set or existing track marks to reduce the number of tracks? (2)				
f. Have the FARP area and perimeter been secured? (1)				
g. Are the vehicles emplaced to allow timely exit? (1)				

h. Are proper and applicable FARP decoys set up? (2)				
i. Are FARP assets dispersed appropriately? (1)				
j. Does the FARP setup take advantage of local vegetation, terrain, and cover to provide concealment and protection? (1)				
k. Does the setup of the FARP take advantage (if possible) of existing structures and buildings? (2)				
l. Do aircraft approach, land and depart into the wind? (2)				

5. PRE-REFUELING OPERATIONS	POL – YES	POL – NO	ASO – YES	ASO – NO
a. Are sufficient personnel assigned to the equipment – one person to operate the pump, one person to operate each nozzle, and one person to fireguard each nozzle (may be a dismounted Aircrewmember)? (1)				
b. Has a fuel sample been taken from each filter separator and fuel source? (1)				
c. Has pressure differential indicator/gauge been tested annually and date recorded on indicator/gauge or in logbook? (1)				
d. Is filter/separator housing marked with date element was changed or put into use?(1)				
e. Have pressure differential checks been conducted and recorded? (1)				
f. Has the complete system been checked for proper operation, pressure, and leaks (to include purging fuel from each nozzle)? (1)				
g. Has a periodic ohmmeter check of positive ground from attach(ment) points been performed? (2)				

6. SITE OPERATION	POL – YES	POL – NO	ASO – YES	ASO – NO
a. Is there an established communication means (per SOP) to control traffic at refueling locations (consider "PAD Control" and "Silent FARPs.") ? (1)				
b. Have passengers (embarking aircraft for the first time, boarding from the FARP) been briefed about proper dismounting/mounting procedures; and do they go to the marshaling area while the aircraft is being refueled? (3)				
c. Is blowing dust or snow a problem at the fuel site? (2)				
d. Are aircraft settling in loose earth during refueling, so as to pose a rollover, low rotor disc, or roll-away hazard? (1)				
e. Are Ground Guides provided for aircraft? (1)				
f. Do Ground Guides use proper marshaling signals? (1)				
g. Do non-essential personnel deplane before refueling? (3)				

h. Is the fire extinguisher carried from its position by the grounding rod to a point where Refuel personnel, Aircrew (at the controls), and Pump Operator (manning the "deadman" switch) are all in line-of-site?(1)				
i. Do Refueling personnel ensure all radios are turned off except the radio used to monitor air traffic? (2)				
j. Do Refueling personnel ensure all armament aboard the aircraft has been set on SAFE? (1)				
k. Are aircraft properly grounded before they are refueled? (1)				
l. Is the nozzle bonded to the aircraft before the refueling cap is opened? (1)				
m. Are aircraft anti-collision and position lights turned off prior to refueling of each aircraft? (1)				
n. Is the dust cap replaced on the nozzle after each refueling? (1)				
o. Are nozzles replaced on the nozzle hanger (grounding rod) or in drip-pan after use? (1)				
p. Is the nozzle grounding cable clamped/attached to the grounding rod when not in use? (1)				
q. If tank vehicles are used as the fuel source for rapid refueling, is the refueling being properly conducted? (3)				
r. Are refueling personnel familiar with emergency fire and rescue procedures? (1)				
s. Are refueling personnel familiar with procedures in case of a fuel spill? (1)				
t. Is a copy of the unit's refueling SOP available and are POL personnel familiar with its contents? (1)				
u. Are appropriate measures in place to facilitate reconstitution and recovery of FARP assets in the event of damage? (1)				

INSTRUCTIONS:

- Each time the FARP is "broken down" and relocated, a new checklist must be completed.
- Upon return from the field environment, the POL OIC/NCOIC shall ensure its immediate forwarding to the unit ASO for retention. Copies will suffice. These will be used for lessons learned and risk management process for future operations.

TACTICAL REFUELING SITE INSPECTION CHECKLIST (AR 710-2)				DATE	
ACTIVITY		SITE LOCATION			
This checklist will be used as a guide in conjunction with FM 10-67-1. The Officer in Charge or Noncommissioned Officer will accompany the designated inspector (Aviation Safety Officer) during the site inspection. As indicated in the yes/no check block, appropriate initials by both parties are required.					
ITEM NO	CHECKLIST ITEM	YES		NO	
		P O L	A S O	P O L	A S O
1	Has the refueling site been selected according to FM 10-67-1 or FM 1-111, Appendix J e.g., minimal terrain slope, obstacle avoidance, A/C spacing, camouflage, FOD minimization?				
2	Was the site layout planned according to FM 10-67-1 or FM 1-111, Appendix J, e.g., traffic patterns, lighting/signal, cover/concealment?				
3	Are fire extinguishers present, one for pump & one for each nozzle? (Minimum size is 20lbs)				
4	Is sufficient water available to wash spilled fuel from personnel or to wet fuel-soaked clothing prior to removing the clothing as prescribed in FM 10-67-1?				
5	Are spill clean-up materials available in the event of an accident?				
6	Are grounding rods being with pumps, filter separators, and at each dispensing point?				
7	Does each nozzle have a 100-mesh screen, dust cap and bonding wire attached?				
8	Are drip pans available at each dispensing point?				
9	Have hoses been inspected for blisters, tears, bulges, dry rot, nick, cuts?				
10	Is refueling site equipped with appropriate lighting for night operations e.g., Y directional markers, refueling point markers? (Lighting options may include bean bags, illumination sticks, reverse polarity paper)				
11	Have air traffic control procedures been established? Is a trained air traffic controller, pathfinder or unit member available or will the unit control movement into and out of the refueling site through pilot briefings?				
12	Has the site been cleared of loose sticks, stones, and other debris?				
13	If using tank vehicles, are they located at least 100 feet from the dispensing point?				
14	Has required preoperations maintenance been performed on tank vehicles if used?				
15	Does the site layout insure proper spacing between aircraft refueling points IAW FM 10-67-1?				

<u>MINIMUM DISTANCE ROTOR HUB TO ROTOR HUB</u>					
CH-47	Side by side	180 feet			
	Nose to tail	140 feet			
UH-1, UH-60, AH-1, AH-64, OH-58		100 feet			

ITEM NO	CHECKLIST ITEM	YES		NO	
		P O L	A S O	P O L	A S O
16	Is the site set up for approach, landing and departure into the wind?				
17	Has a visual sample been taken from each dispensing nozzle?				
18	Has an Aqua-Glo sample been taken from the outlet side of the filter separator?				
19	Has a filter membrane color-rating sample been taken for FARE, AAFARS, Fat Cow, Wet Hawk, and FSSP systems when initially set up for a specific site?				
20	Have pressure differential gauges been checked and recorded?				
21	Have filter separators been stenciled with the date elements were changed and are they in compliance with the two-year requirement?				
22	Is blowing dust or snow a problem at the refueling site?				
23	Are "Passenger Marshalling Area", and "No Smoking " signs posted?				
24	Are refueling personnel familiar with emergency procedures in the event of a spill?				
25	Do ground guides know the proper marshalling signals?				
26	Are Tactical Standing Operating Procedures on hand to provide guidance on aircraft refueling?				
27	Have personnel received training on fire fighting and crash rescue?				
28	Are sufficient personnel assigned and available to tend the pumps, refuel aircraft, and perform fireguard duties?				
29	Are petroleum supply personnel wearing appropriate protective clothing IAW FM 10-67-1? (Sleeves rolled down, gloves, eye protection, and hearing protection when noise hazard is present)				
30	Has the complete system been checked for proper operation prior to first aircraft arriving i.e., pump, hoses, couplings, and leaks?				

REMARKS	
PRINTED NAME OF POL OIC OR NCOIC	SIGNATURE
PRINTED NAME OF AVIATION SAFETY INSPECTOR	SIGNATURE

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UNIT DESIGNATION
LANDING AREA LAYOUT

NORTH

WEST

EAST

SOUTH

I have inspected this landing area and consider it suitable for helicopter usage. Limitations (if any) are as follows:

Aviation Safety Officer, Unit, Date

INSTRUCTIONS:

1. Indicate approximate size of landing area.
2. Show hazards within the landing area.
3. Show hazards in the surrounding area.
4. Show preferred approaches considering obstacles, winds, turbulence, noise abatement, etc.
5. Indicate best takeoff directions considering items in #4 above.
6. Show any other information you consider important for safe flight operations.

PZ/LZ/FARP Diagram Template

Name		Use [PZ/LZ/FARP/Etc.]		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; justify-content: space-between; width: 100%;"> N </div> <div style="display: flex; justify-content: space-between; width: 100%;"> W E </div> <div style="display: flex; justify-content: center; width: 100%;"> S </div> </div>
Location [LAT/LONG]		Location [UTM]		
Landing Direction		Safety Hazards		
Distance [To SP/From RP]		Course [To SP/From RP]		

PREACCIDENT PLAN UPDATED:

PRIMARY CRASH ALARM SYSTEM: The operations personnel shall operate the primary crash alarm system through regular telephone or messenger.

FLIGHT OPERATIONS

CRASH FIRE STATION

AMBULANCE STATION/SAFD

MEDEVAC

Activate initial crash alarm through the telephone by calling flight operations at _____; if there isn't any response then dial _____. If you reach someone at _____ or _____ describe the nature of the alarm by announcing: "Crash on the Field".

PRIMARY CRASH ALARM SYSTEM: DIAL _____ . IF NO ANSWER THEN DIAL _____ .

FLIGHT OPERATIONS SHALL:

1. Activate the Primary Crash Alarm System if informed of a crash by notifying all of the pertinent parties in this plan.
2. Control, direct, coordinate, and dispatch personnel, aircraft, equipment, and convoys to locate or to service the crash scene.
3. Establish and control an adequate Crash Pass System.
4. Monitor requests from the Crash Area for special or additional assistance or equipment.
5. Serve as post control center for collection and dissemination of crash data, and for general direction of crash investigation activities.
6. Maintain a complete accident investigation kit.
7. Secure the flight records of the crew involved in the accident.

FLIGHT OPERATIONS: _____

CRASH FIRE STATION SHALL:

1. Respond immediately to a crash alarm as directed by _____ Fire Alarm.
2. Conduct rescue effort. Supervise crash until fire is under control.
3. Request through the Event Commander additional fire-fighting equipment where deemed necessary because of location or nature.

LOCAL FIRE DEPARTMENT _____

FT _____ FIRE DEPARTMENT _____

CRASH FIRE STATION: FIRE DEPARTMENT: 911

MEDICAL OFFICER:

1. Dispatch medical personnel to the crash scene via ambulance or helicopter whichever permits the earliest arrival of personnel and earliest recovery of the injured.
2. Conduct periodic training of all medical corpsmen who may be assigned to duties at the crash scene.
3. Orient ambulance crews to the best routes to reach the general area shown on the accident grid map sections.
4. Request the post medical officer (if applicable) to obtain off-post ambulance and/or medical assistance when necessary because of crash location or natural barriers.
5. Supervise the removal and transport of the injured, and provide emergency treatment.

Army Hospital Emergency Room _____

AMBULANCE: _____

HELICOPTER CREW SHALL:

1. Ready the helicopter for immediate departure to the crash site; transport medical corpsman, or other crash crews as directed by Flight Operations.
2. Perform SAR utilizing the Clear Plastic Matrix found in the aircraft logbook. Place the Clear Plastic Matrix on the selected map with the center of the matrix placed on an easily recognizable feature. Announce the corresponding block involving the crash site. Use this method to direct rescue vehicles to the crash site or to divide the area for SAR purposes. Whenever possible a six digit grid or a LAT/LONG are the preferred method of identifying locations. SAR and DART are internal unit missions.
3. Transport Senior Officer of the Accident Investigation Board to the crash scene.
4. Radio preliminary report of crash circumstances from the accident scene to the tower or controlling agency.
5. Help guide ground movement of crash crews to the crash scene.
6. Properly equip the helicopter for the mission.

MEDEVAC _____

HELICOPTER – SAR: _____ **MEDEVAC:** _____

SECONDARY CRASH ALARM SYSTEM:

	<u>WORK</u>	<u>HOME</u>
Flight Surgeon	_____	_____
Provost Marshall	_____	_____
Maintenance Officer	_____	_____
Aviation Safety Officer	_____	_____
Medical Examiner	_____	_____

STATE LEVEL AVIATION

CALL UNTIL YOU REACH ONE OF THE FOLLOWING INDIVIDUALS!

	<u>PAGER/PIN</u>	<u>HOME/CELL</u>
Aviation Officer		
OPNS Officer		
Logistics Officer		
Safety Officer		

SECONDARY CRASH ALARM SYSTEM: Notify the SAO ASAP after EMS. Fire Dept, & CDR

MEDICAL OFFICER OR ASSISTANT MEDICAL OFFICER

1. Alert hospital emergency room of crash to expedite notification of medical personnel.
2. Ready medical facilities and equipment.
3. Serve on the Accident Investigation Board; assist in the determination of causes of the accident and injury, and the selection of accident prevention measures.
4. The president of the Accident Investigation Board shall consult with the hospital or medical facilities utilized if a medical officer is not assigned to the team.

MEDICAL OFFICER – EMERGENCY ROOM: _____

PROVOST MARSHALL OR POLICE SHALL:

1. Dispatch guards to the assembly point as needed to provide adequate security and order at the crash scene, and prevent pilferage of wreckage.
2. Brief police personnel on specific duties at the aircraft accident scene, including restraint of spectators, crash pass requirements, handling of wreckage, security of classified materials, and safeguarding government property.
3. Escort recovery teams to the accident scene.
4. Ensure that all military police patrols know the best routes to the general area, and post telephone numbers (radio control data) on the grid map sections.
5. Determine off-post departments that fit into the grid map area, and post their telephone numbers on the grid map.
6. Obtain and supervise non-military guards where there are insufficient guards to secure the accident area.

Provost Marshall	_____
County Sheriff's Department	_____
United States Marshall – Operations	_____
Department of Public Safety	_____
Rangers	_____
Military Police Company	_____

PROVOST MARSHALL: _____

AIRCRAFT MAINTENANCE OFFICER:

1. Ensure availability of qualified personnel to assist the accident investigation board at the accident scene.
2. Assist the board in the recovery and identification of wreckage, and determination of the operating condition of various parts.
3. Secure the aircraft historical records for accident board.
4. Assist the board in “reconstruction” of the aircraft.
5. Complete an ECOD as prescribed in TB 43-0002-3.

AIRCRAFT MAINTENANCE OFFICER: _____

AVIATION SAFETY OFFICER SHALL:

1. Proceed to the specified assembly point.
2. Take charge of the wreckage until arrival of the Accident Investigation Board.
3. Review implementation of this plan to ensure that all agencies conduct tests to verify the adequacy of the plan for all phases and circumstances.
4. Review aircraft reports before forwarding to reviewing authority. Give particular attention to cause determination and to preventive measures designed to prevent other accidents.
5. Conduct a comprehensive flight safety-training program.
6. Prepare and dispatch the proper accident report(s).
7. Be thoroughly familiar with AR 385-95 and AR 385-40.
8. Have alternate Aviation Safety Officer designated in advance.
9. Notify Aviation Safety Officer in the next higher chain of command.
10. Alternate Safety Officer: _____.

AVN ASO _____.

AVIATION SAFETY OFFICER: _____ **ALTERNATE:** _____

PUBLIC INFORMATION OFFICER SHALL:

1. Dispatch PIO personnel to the assembly point and then proceed to the scene to handle news release.
2. Maintain liaisons with local news services to help minimize adverse public relations that may evolve from an accident.
3. Assist investigators by identifying witnesses and by soliciting return of pilfered wreckage.
4. Take photographs as directed by the Senior Officer of the Accident Investigation Board.
5. Upon the direction of the Commander or Aviation Safety Officer, notify the passenger's next-of-kin.
6. Provide Photographer – Extension:_____.

INFORMATION OFFICER: _____.

GARRISON AND UNIT COMMANDERS, SAFETY OFFICERS, MAINTENANCE OFFICERS.

<u>NAME</u>	<u>HOME</u>	<u>WORK</u>
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GARRISON AND UNIT COMMANDERS, ASOs, & MAINTENANCE OFFICER

ACCIDENT INVESTIGATION BOARD SHALL:

1. Be notified of accidents by AGTX-AV who shall have conspicuously posted the telephone numbers of all board members and alternates.
2. Upon notification, report to specified assembly point.
3. Take charge of accident investigation upon arrival at crash scene (except for rescue and fire-fighting role) through its ranking officer.
4. Conduct and direct the investigation as prescribed by AR 385-95 and AR 385-40.
5. Recover and release wreckage material to reclamation crews for transportation to reconstruction site. See attached message for guidance on the use of PPC at an accident site.
6. Bring to the assembly point appropriate apparel, gear, and equipment suitable for the investigation. This shall include a complete field kit for aircraft accident investigation (assigned to the Aviation Safety Officer), President of the Accident Investigation Board.
7. Complete the accident investigation report and forward through command channels for approval, as prescribed by AR 385-95, AR 385-40, and DA PAM 385-40.
8. Designate, instruct, and summon where needed, standing investigating groups for specialized investigative duty.
 - a. Coordinating Group
 - b. Structures and Aerodynamic Group
 - c. Power Plant Group
 - d. Electrical Group
 - e. Flight Operations Group

ACCIDENT INVESTIGATION BOARD: _____

WEATHER STATION SHALL:

1. Provide an analysis of the weather occurring at the time and place of the mishap. It is essential that the weather unit or service be promptly advised of an aircraft accident.

DESIGNATED PERSONNEL SHALL:

1. Call the weather station and request to speak to the OIC and NCOIC.
2. Advise the OIC and NCOIC of the location and time of the mishap.
3. Request a weather report at the location and time of the mishap.
4. Advise the weather personnel not to disseminate any information except that necessary to complete the request.
5. Note the names of the weather personnel contacted and advise them of the telephone number to call when they complete their report.
6. Advise that a written copy the weather report shall be required.

Air Force Base Weather:

AIR FORCE WEATHER OFFICER: _____

STATION CRASH ALARM SYSTEM: Report all Aircraft Mishaps to the Commander or to one of the following:

STAFF DUTY OFFICER:

Initial Mishap Report. The first person becoming aware of the mishap shall notify HQ _____ about aircraft involved in any mishap. That means even a Class E precautionary landing.

1. Duty Hours: DSN-----
Commercial-----

2. Non-Duty Hours, weekends, holidays:

Staff Duty Officer DSN-----
Commercial-----

3. In the event of a Class A Accident notify the HQ _____ Safety Officer. IMMEDIATELY!

SAFETY OFFICER

Duty Hours: DSN: _____
Other Times Pager: _____ (SDO)

4. Information should be available as requested. Notify the HQ, Aviation Officer, Commander or Safety Officer before communicating with USASC.

5. Class A only – Reference DAIG MSG dated MAR78. USASC Operations Center

DSN-----558-2660 or 3410
Commercial-----334-255-4273 or 2660
After Duty Hours---334-598-3308

6. Emergency Operations Center-----DSN: _____

7. Aviators Responsibilities.

- a. Aviators shall not attempt to start any aircraft involved in a mishap without direction from the commander or maintenance officer.
- b. Do not fly the aircraft until the maintenance is complete and released for flight by a technical inspector (that was not part of the original crew) under the commander's direct control.
- c. The term mishap applies to all precautionary landings. Forced landings, incidents, and accidents involving damage or suspected damage or malfunction of the aircraft.

AIRCRAFT MISHAP REPORTING PROCEDURES (TELEPHONIC)

PURPOSE. To prescribe procedures, to establish responsibilities for ensuring the quickest and most systematic rescue efforts possible, and to prescribe investigative functions for aircraft accidents, which shall produce maximum results?

SCOPE. This plan applies to all aviation units and personnel operating aircraft the tactical field.

RESPONSIBILITIES.

1. The _____ shall appoint an Accident Investigation Board.
2. The commander is responsible for the readiness and adequacy of the Pre-Accident & Crash Rescue Plan.
3. Commanders of aviation units shall inform and orient all personnel concerned, including permanent or temporary replacements, regarding their specific duties and functions as prescribed by this plan.
4. The commander after the initial response is complete shall initiate notification of _____.
5. The commander is responsible for the notification of the next-of-kin (NOK) of individual(s) fatally injured in mishaps. See AR 600-8-1 Chapter 4 for additional details concerning notification procedures. Conduct the notification of the NOK following the instructions from AG. The individual designated to notify the NOK should consider the following:
 - a. Check with neighbors and friends about the physical condition of the NOK for possible heart condition, nervous disorder, pregnancy, etc.
 - b. Be accompanied by the Chaplain, friend of the family, neighbors, and physician.
 - c. Be straightforward, honest, and truthful. Use tact and kindness.
 - d. DO NOT REVEAL GORY DETAILS.
 - e. In case of traumatic injuries and unconfirmed fatalities, advise the NOK of the individual's location. If possible, help the spouse or immediate NOK to obtain transportation.

PROGRAM RESPONSIBILITIES AND NOTIFICATION OF THE NEXT OF KIN

RECEIPT OF INITIAL CRASH REPORT.

1. On or Off-Post crash reports shall be reported to the commander as soon as possible.
2. Initial Crash Report Data: Obtain data from the person making the initial report of the accident to help establish the location and nature of the accident. The format to be used to receive and disseminate crash data shall be the top page on the left side of the Pre-Accident Plan folder. The report format for ground accidents is under the aviation format on the left side of the Pre-Accident Plan folder.
3. SAR activities - See the right side of the Pre-Accident Plan folder under the Helicopter Tab.
4. The _____ (enter MEDEVAC Unit name here) conducts medical evacuation for _____ (enter facility name here). Medical evacuation by other non-MEDEVAC aircraft shall occur only when a delay in time may result in death.
5. Aircraft not directly involved in the SAR activity shall remain clear of the search area by five statute miles.
6. Air-Ambulance aircraft have priority. Do not hinder the performance of the air ambulance mission.

INITIAL CRASH REPORT INSTRUCTIONS

END
OF
DOCUMENT